

I CLAIM:

5 1. Apparatus for reconditioning a protective coating on a digital disc, said apparatus comprising at least one tool at a first workstation being operable to be brought into contact with said protective coating and a disc advancement mechanism to advance said digital disc from said first workstation to a second and successive workstation.

10 2. Apparatus as in claim 1 wherein said disc advancement mechanism comprises a suction tool to grasp said digital disc at said first workstation and to deposit said digital disc at said second workstation.

15 3. Apparatus as in claim 2 wherein said suction tool is connected to a movable member, said movable member being movable relative to said first and second workstations.

4. Apparatus as in claim 3 wherein said movable member is a shaft having a longitudinal axis, said shaft being rotatable about said longitudinal axis and being

00641EEM 070780

reciprocal along said longitudinal axis.

5. Apparatus as in claim 4 and further comprising a feed area to feed said digital discs to said first and second workstations, said feed area comprising a cartridge to hold a plurality of said digital discs.

6. Apparatus as in claim 5 wherein said first and second workstations are defined by a first and second turntable, respectively, said suction tools depositing and removing said digital discs from said first and second turntables.

7. Apparatus as in claim 6 wherein said first and second workstations are further defined by a first and second set of worktools, respectively, said first set of worktools being operable on said digital disc to remove material from said protective coating.

8. Apparatus as in claim 7 wherein said second set of worktools are operable on said digital disc to rinse said digital disc of said removed material.

9. Apparatus as in claim 8 and further comprising a third workstation and a third set of worktools operably associated with said third workstation, said third set of worktools being operable to polish said protective coating on said digital disc.

10. Apparatus as in claim 9 wherein said feed area further comprises a turntable, said turntable being rotatable between a load position wherein said digital disc is retrieved from said cartridge and an unload position wherein said digital disc is removed from said turntable.

11. Apparatus as in claim 10 wherein said digital disc is removed from said turntable by said suction tools.

12. Apparatus as in claim 11 wherein said worktools are mounted on a head, said head being vertically movable relative to said turntables, at least some of said worktools being rotatable relative to said head.

13. Apparatus as in claim 12 wherein said worktools form a plurality of sets, each of said sets of

worktools being independently driven relative to said
remaining ones of said sets of worktools.

14. Apparatus as in claim 13 wherein said
shaft has an internal cavity, said cavity having a negative
5 or suction pressure, said negative pressure being applied to
said suction tools from said internal cavity of said shaft.

15. Apparatus as in claim 14 and further
comprising a receiving cartridge, said receiving cartridge
receiving said digital disc following the last one of said
10 plurality of workstations.

16. Method for reconditioning a protective
coating on a compact disc, said method comprising
positioning said disc in a first workstation, bringing a
first tool into contact with said protective coating for
15 reconditioning said protective coating in a first operation
and transferring said compact disc from said first
workstation to a subsequent work station when said first
tool has completed said first operation.

17. Method as in claim 16 wherein said

digital disc is transferred from said first to said second workstation by a suction member.

18. Method as in claim 17 and further comprising removing damaged protective layer from said digital disc in said first workstation.

Sub B3
B3 19. Method of reconditioning a plurality of digital discs which have had protective coatings damaged resulting in a misread or a non-read of data on said discs, said method comprising obtaining said digital discs from a source of digital discs, transferring said digital discs from said source to a protective coating reconditioning machine, reconditioning said protective coatings of said digital discs in said reconditioning machine by automatic transfer of said discs between at least two workstations in a reconditioning process to obtain reconditioned discs and returning said reconditioned discs to said source.

add atk